Identifying Flexible Design Opportunities: Getting From a Procedural to an Execution Model

An offshore drilling rig faces continuous need for upgrades especially due to significant uncertainty in all phases of the lifecycle. As in other application fields, rigid design usually prevails, thus leading to value losses that could have been avoided by flexible design. This research focuses on supporting system suppliers to identify and offer customer relevant and effective flexible design concepts. Based on a procedural model for identifying Flexible Design Opportunities (FDOs), it suggests how to use and embed industry specific knowledge in an execution model for application in tender projects. This paper describes the different types of models required for supporting the identification of FDOs. It provides details on the interview procedure for data acquisition and suggests a mapping and processing of the elicited data in a dedicated model. This model supports generating classes of objects which facilitate the set-up, management and maintenance of the execution model. The paper indicates...
which parts of the procedure are generally applicable in related industries, and which require the integration of industry specific data.

Stichworte:

Flexibility, Flexible Design Opportunities, Uncertainty, Conceptual design, Decision making

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